



CONTENTS OF VOLUME 137

Vol. 137C, No. 1

Appreciation list

- I In Appreciation

General papers

- K.Z. Mahmoud, F.W. Edens, E.J. Eisen and G.B. Havenstein 11 The effect of dietary phosphorus on heat shock protein mRNAs during acute heat stress in male broiler chickens (*Gallus gallus*)
- L. de Almeida, A.C.O. Cintra, E.L.G. Veronese, A. Nomizo, J.J. Franco, E.C. Arantes, J.R. Giglio and S.V. Sampaio 19 Anticretal and antitumoral activities of gel filtration fractions of aqueous extract from *Tabernaemontana catharinensis* (Apocynaceae)
- M. Abdollahi, S. Mostafalou, S. Pournourmohammadi and S. Shadnia 29 Oxidative stress and cholinesterase inhibition in saliva and plasma of rats following subchronic exposure to malathion
- L.A. Clowes and K.A. Francesconi 35 Uptake and elimination of arsenobetaine by the mussel *Mytilus edulis* is related to salinity
- E.O. Oruc, Y. Sevgiler and N. Uner 43 Tissue-specific oxidative stress responses in fish exposed to 2,4-D and azinphosmethyl
- D.R. Kashian 53 Toxaphene detoxification and acclimation in *Daphnia magna*: do cytochrome P-450 enzymes play a role?
- J.H. Ko, J.P. Yan, L. Zhu and Y.P. Qi 65 Identification of two novel fibrinolytic enzymes from *Bacillus subtilis* QK02
- D. Malagoli, M. Lusvardi, F. Gobba and E. Ottaviani 75 50 Hz magnetic fields activate mussel immunocyte p38 MAP kinase and induce HSP70 and 90
- A.L. Katynski, M.M. Vijayan, S.W. Kenneddy and T.W. Moon 81 3,3',4,4',5-Pentachlorobiphenyl (PCB 126) impacts hepatic lipid peroxidation, membrane fluidity and β -adrenoceptor kinetics in chick embryos

I Instructions to Authors

V Announcement

Vol. 137C, No. 2

General papers

- A.R. White, S.A. Curtis and R.J. Walker 95 Evidence for a possible role for nitric oxide in the modulation of heart activity in *Achatina fulica* and *Helix aspersa*
- G.S. Asha and M. Indira 109 Combined effect of selenium and ascorbic acid on alcohol induced hyperlipidemia in male guinea pigs

Contents of volume

L. Zhang, J. Wang, M. Yu and B. Ru	115	Expression and characterization of ARSP1 from <i>Eisenia fetida</i>
A.M. Gutiérrez, G.R. Reboredo, S.M. Mosca and A. Catalá	123	Fatty acid composition and lipid peroxidation induced by ascorbate-Fe ²⁺ in different organs of goose (<i>Anser anser</i>)
P.S.M. Carvalho, D.B. Noltie and D.E. Tillitt	133	Intra-strain dioxin sensitivity and morphometric effects in swim-up rainbow trout (<i>Oncorhynchus mykiss</i>)
M.D. Morrow, D. Higgs and C.J. Kennedy	143	The effects of diet composition and ration on biotransformation enzymes and stress parameters in rainbow trout, <i>Oncorhynchus mykiss</i>
T.A.A. Rocha-e-Silva, M.M. Rossa, F.T. Rantin, T. Matsumura-Tundisi, J.G. Tundisi and I.A. Degterev	155	Comparison of liver mixed-function oxygenase and antioxidant enzymes in vertebrates anaesthetic induction and recovery
J.V. Hill and M.E. Forster	167	Cardiovascular responses of Chinook salmon (<i>Oncorhynchus tshawytscha</i>) during rapid
E.J. Scollon, J.A. Carr and G.P. Cobb	179	The effect of flight, fasting and <i>p,p'</i> -DDT on thyroid hormones and corticosterone in Gambel's white-crowned sparrow, <i>Zonotrichia leucophrys gambelli</i>
J.M. Conlon, B. Seidel and P.F. Nielsen	191	An atypical member of the brevinin-1 family of antimicrobial peptides isolated from the skin of the European frog <i>Rana dalmatina</i>
G. Giannaccini, L. Betti, L. Palego, B. Chelli, A. Gallo A. Pirone, O. Fabiani, S. Bertellotti and A. Lucacchini	197	In vitro effects of lead ions on peripheral benzodiazepine receptors and adenylyl cyclase activity in the mantle of <i>Mytilus galloprovincialis</i>
I		Instructions to Authors
V		Announcement

Vol. 137C, No. 3

General papers

M. del Pilar Corena, M.M. Fiedler, L. VanEkeris, C. Tu, D.N. Silverman and P.J. Linser	207	Alkalization of larval mosquito midgut and the role of carbonic anhydrase in different species of mosquitoes
L.A. Showalter, S.A. Weinman, M. Osterlie and S.F. Lockwood	227	Plasma appearance and tissue accumulation of non-esterified, free astaxanthin in C57BL/6 mice after oral dosing of a disodium disuccinate diester of astaxanthin (<i>Heptax</i> TM)
E.M. Hughes and E.P. Gallagher	237	Effects of 17- β estradiol and 4-nonylphenol on phase II electrophilic detoxification pathways in largemouth bass (<i>Micropterus salmoides</i>) liver
A.O. Cheek, V.W. King, J.R. Burse, D.L. Borton and C.V. Sullivan	249	Bluegill (<i>Lepomis macrochirus</i>) vitellogenin: purification and enzyme-linked immunosorbent assay for detection of endocrine disruption by papermill effluent
R. Srinivas, S.S. Udikeri, S.K. Jayalakshmi and K. Sreeramulu	261	Identification of factors responsible for insecticide resistance in <i>Helicoverpa armigera</i>
G. Nette, S. Scippa, A. De Candia and M. de Vincentiis	271	Cytochemical localisation of vanadium (III) in the blood cells of the ascidian <i>Phallusia fumigata</i>
N. Ohuchi, K. Hayashi, K. Koike, Y. Kizawa, T. Kusama, M. Ohsawa, Y. Taniguchi, K. Iwamoto, M. Sano and H. Murakami	281	Pharmacological properties of angiotensin II receptors in cultured rabbit gingival fibroblasts

X. Zhong, Y. Xu, T. Liang, T. Liao and J. Wang

- 291 Vitellogenin in rare minnow (*Gobiocypris rarus*): identification and induction by waterborne diethylstilbestrol

I Instructions to Authors

Vol. 137C, No. 4

General papers

X. Zhou, C. Niu and R. Sun

- 299 The effects of vitamin E on antiacid stress ability in juvenile soft-shelled turtles (*Pelodiscus sinensis*)

J. Gronciewska, A. Biegiewska, M.S. Ziętara and E.F. Skorkowski

- 307 Inhibition by tributyltin of herring skeletal muscle lactate dehydrogenase activity

A.R. Scholik, U.-S. Lee, C.K. Chow and H.Y. Yan

- 313 Dietary vitamin E protects the fathead minnow, *Pimephales promelas*, against noise exposure

C. Dautremepuits, S. Paris-Palacios, S. Betoulle and G. Vernet

- 325 Modulation in hepatic and head kidney parameters of carp (*Cyprinus carpio* L.) induced by copper and chitosan

M.A. Rau, J. Whitaker, J.H. Freedman and R.T. Di Giulio

- 335 Differential susceptibility of fish and rat liver cells to oxidative stress and cytotoxicity upon exposure to prooxidants

M. Abdollahi, M. Donyavi, S. Pournourmohammadi and M. Saadat

- 343 Hyperglycemia associated with increased hepatic glycogen phosphorylase and phosphoenolpyruvate carboxykinase in rats following subchronic exposure to malathion

F.E. Williams and W.S. Messer Jr.

- 349 Muscarinic acetylcholine receptors in the brain of the zebrafish (*Danio rerio*) measured by radioligand binding techniques

R. Gabbianelli, G. Falcioni, G. Lupidi, L. Greci and E. Damiani

- 355 Fluorescence study on rat epithelial cells and liposomes exposed to aromatic nitroxides

B. Baldisserotto, C. Kamunde, A. Matsuo and C.M. Wood

- 363 Acute waterborne cadmium uptake in rainbow trout is reduced by dietary calcium carbonate

I Contents of Volume

V Subject Index

VII Author Index

IX Instructions to Authors



